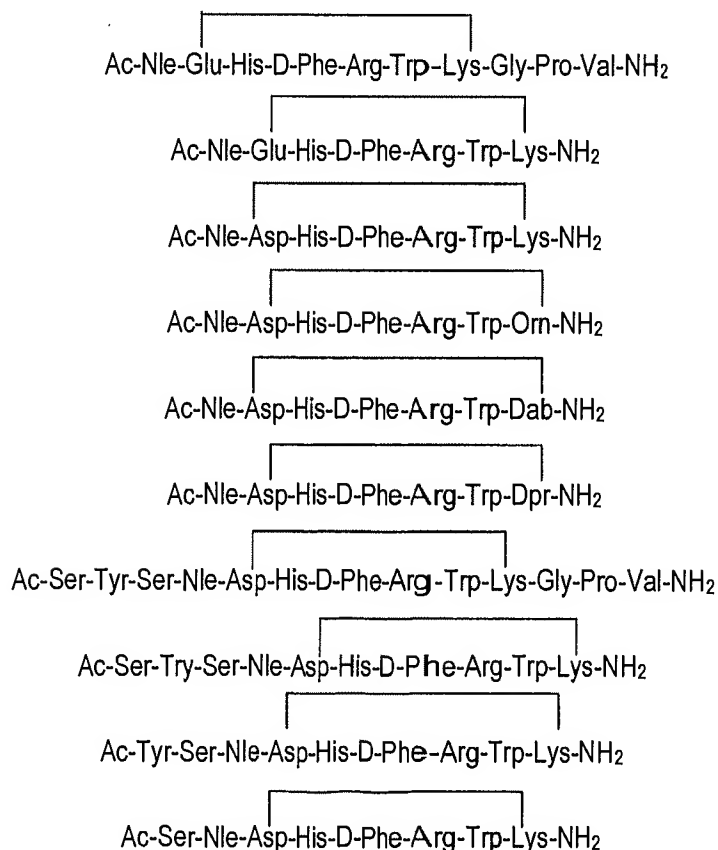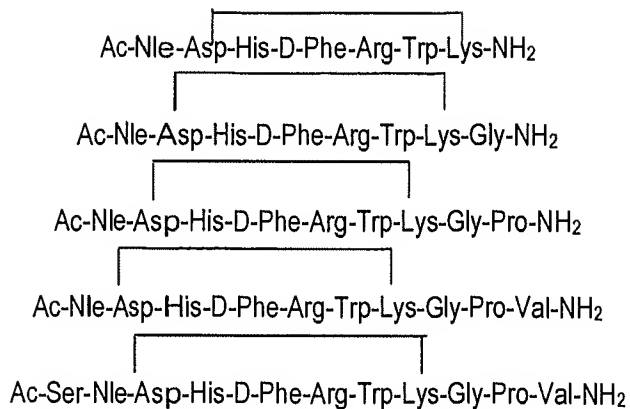**CLAIMS:**

1. A method for inducing melanogenesis in a human subject having an MC1R variant allele associated with loss of or diminished receptor function, which comprises the steps of administering to said subject an amount of an α-MSH analogue effective to induce melanogenesis by the melanocytes in the skin or other epidermal tissue of the subject.

2. The method of claim 1, wherein the α-MSH analogue is selected from:

    (a) compounds of the formula:

    Ac-Ser-Tyr-Ser-M-Gln-His-D-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH$_2$

    wherein M is Met, Nle or Lys; and

    (b) compounds of the formula:

    R$_1$-W-X-Y-Z-R$_2$

    wherein

    R$_1$ is Ac-Gly-, Ac-Met-Glu, Ac-Nle-Glu-, or Ac-Tyr-Glu-;

    W is –His- or –D-His-;

    X is –Phe-, -D-Phe-, -Tyr-, -D-Tyr-, or -(pNO$_2$)D-Phe^7-;

    Y is –Arg- or –D-Arg-;

    Z is –Trp- or –D-Trp-; and

    R$_2$ is –NH$_2$; -Gly-NH$_2$; or –Gly-Lys-NH$_2$.

3. The method of claim 1, wherein the α-MSH analogue is a cyclic analogue wherein an intramolecular interaction exists (1) between the amino acid residue at position 4 and an amino acid residue at position 10 or 11, and/or (2) between the amino acid residue at position 5 and the amino acid residue at position 10 or 11.

4. The method of claim 3, wherein the intramolecular interaction is a disulfide bond or other covalent bond.

5. The method of claim 1, wherein the α-MSH analogue is selected from the group consisting of:

    Ac-Ser-Tyr-Ser-Nle-Glu-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH$_2$

    Ac-Ser-Tyr-Ser-Nle-Asp-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH$_2$

Ac-Nle-Glu-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Gly-NH2

Ac-Nle-Glu-His-D-Phe-Arg-Trp-Lys-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH2

Ac-Nle-Glu-His-D-Phe-Arg-Trp-Orn-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Orn-NH2

Ac-Nle-Glu-His-D-Phe-Arg-Trp-Dab-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Dab-NH2

Ac-Nle-Glu-His-D-Phe-Arg-Trp-Dpr-NH2

Ac-Nle-Glu-His-Phe-Arg-Trp-Lys-NH2

Ac-Nle-Asp-His-Phe-Arg-Trp-Lys-NH2

6.   The method of claim 1, wherein the α-MSH analogue is selected from the group consisting of:

Ac-Nle-Glu-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH2

Ac-Nle-Glu-His-D-Phe-Arg-Trp-Lys-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Orn-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Dab-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Dpr-NH2

Ac-Ser-Tyr-Ser-Nle-Asp-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH2

Ac-Ser-Try-Ser-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH2

Ac-Tyr-Ser-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH2

Ac-Ser-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH2

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH$_2$

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-Gly-NH$_2$

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-Gly-Pro-NH$_2$

Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH$_2$

Ac-Ser-Nle-Asp-His-D-Phe-Arg-Trp-Lys-Gly-Pro-Val-NH$_2$

7. The method of claim 1, wherein the α-MSH analogue is

[D-Phe^7]-α-MSH,

[Nle^4, D-Phe^7]-α-MSH,

[D-Ser^1, D-Phe^7]-α-MSH,

[D-Tyr^2, D-Phe^7]-α--MSH,

[D-Ser^3, D-Phe^7]-α--MSH,

[D-Met^4, D-Phe^7]-α-MSH,

[D-Glu^5, D-Phe^7]-α-MSH,

[D-His^6, D-Phe^7]-α-MSH,

[D-Phe^7, D-Arg^8]-α-MSH,

[D-Phe^7, D-Trp^9]-α-MSH,

[D-Phe^7, D-Lys^{11}]-α-MSH,

[D-Phe-^{7}, D-Pro^{12}]-α-MSH,

[D-Phe^7, D-Val^{13}]-α-MSH,

[D-Ser^1, Nle^4, D-Phe^7]-α-MSH,

[D-Tyr^2, Nle^4, D-Phe^7]-α-MSH,

[D-Ser^3, Nle^4, D-Phe^7]-α-MSH,

[Nle^4, D-Glu^5,D-Phe^7]-α-MSH,

[Nle^4, D-His^6, D-Phe^7]-α-MSH,

[Nle^4, D-Phe^7, D-Arg^8]-α-MSH,

[Nle^4, D-Phe^7, D-Trp^9]-α-MSH,

[Nle^4, D-Phe^7, D-Lys^{11}]-α-MSH,

[Nle^4, D-Phe^{7,} D-Pro^{12}]-α-MSH,

[Nle^4, D-Phe^7, D-Val^{13}]-α-MSH,

[Cys^4, Cys^{10}]-α-MSH

[Cys^4, D-Phe^7, Cys^{10}]-α-MSH

[Cys^4, Cys^{11}]-α-MSH

[Cys^5, Cys^{10}]-α-MSH

[Cys^5, Cys^{11}]-α-MSH

[Cys^4, Cys^{10}]-α-MSH$_{4\text{-}13}$

[Cys^4, Cys^{10}]—α-MSH$_{4\text{-}12}$

[Nle^4, D-Phe^7]-α-MSH$_{4\text{-}10}$,

[Nle^4, D-Phe^7]-α-MSH$_{4\text{-}11}$,

[D-Phe^7]-α-MSH$_{5\text{-}11}$,

[Nle^4, D-Tyr^7]-α-MSH$_{4\text{-}11}$,

[(pNO$_2$)D-Phe^7]-α-MSH$_{4\text{-}11}$,

[Tyr^4, D-Phe^7]-α-MSH$_{4\text{-}10}$,

[Tyr^4, D-Phe^7]-α-MSH$_{4\text{-}11}$,

[Nle^4]-α-MSH$_{4\text{-}11}$,

[Nle^4, (pNO$_2$)D-Phe^7]-α-MSH$_{4\text{-}11}$,

[Nle^4, D-His^6]-α-MSH$_{4\text{-}11}$,

[Nle^4, D-His^6, D-Phe^7]-α-MSH$_{4\text{-}11}$,

[Nle^4, D-Arg^8]-α-MSH$_{4\text{-}11}$,

[Nle^4, D-Trp^9]-α-MSH$_{4\text{-}11}$,

[Nle^4, D-Phe^7, D-Trp^9]-α-MSH$_{4-11}$,

[Nle^4, D-Phe^7]-α-MSH$_{4-9}$, or

[Nle^4, D-Phe^7, D-Trp^9]-α-MSH$_{4-9}$.

8.   The method of claim 1, wherein the α-MSH analogue is

[Nle^4, D-Phe^7]-α-MSH$_{4-10}$,

[Nle^4, D-Phe^7]-α-MSH$_{4-11}$,

[Nle^4, D-Phe^7, D-Trp^9]-α-MSH$_{4-11}$, or

[Nle^4, D-Phe^7]-α-MSH$_{4-9}$.

9.   The method of claim 1, wherein the α-MSH analogue is [Nle^4, D-Phe^7]-α-MSH.

10.   Use of an α-MSH analogue in the manufacture of a preparation for inducing melanogenesis in a human subject having an MC1R variant allele associated with loss of or diminished receptor function.